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Jorgovanovic(10) **Pub. No.: US 2017/0090864 A1**(43) **Pub. Date: Mar. 30, 2017**(54) **MEDIATION OF WAKEWORD RESPONSE
FOR MULTIPLE DEVICES**(52) **U.S. Cl.**CPC *G06F 3/167* (2013.01); *G10L 15/22*
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21/0332 (2013.01); *G10L 2015/223* (2013.01)(71) Applicant: **Amazon Technologies, Inc.**, Seattle,
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G10L 15/22 (2006.01)(57) **ABSTRACT**

Devices, systems, and methods provide synchronization of multiple voice-controlled devices to establish priority of one of the devices to respond to an acoustic signal, preventing other devices from responding to a single user command. Each device is configured to mediate its response to a wakeword by, after detecting the wakeword in an audio input, generating a data packet and attempting to send it to the other devices over a communication channel that prevents data collision. One device will succeed in sending the packet, while the other devices cannot until they receive the first device's packet, indicating that the first device has priority. Additionally, the devices may process their audio inputs to determine a signal quality, the signal qualities are shared between all devices, and the device with the best signal quality assumes priority.

